AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (**Currently amended**) A ~~transmission system comprising~~ method for performing a downshift in a transmission system including first and second rotatable shafts, said first shaft having a longitudinal axis, and means for transferring drive from one of the shafts to the other shaft comprising first and second gear wheels each rotatably mounted on the first shaft and having drive formations formed thereon, a selector assembly for selectively transmitting torque between the first shaft and the first gear wheel and between the first shaft and the second gear wheel, wherein the selector assembly comprises an actuator assembly and first and second sets of engagement members that are moveable into and out of engagement with the first and second gear wheels independently of each other, said ~~selector~~ actuator assembly being arranged ~~such that when one of the gear wheels is selected by~~ to move the first and second sets of engagement members in first and second directions along the longitudinal axis of the first shaft, and when one of the first and second gear wheels is selected by the first and second sets of engagement members, the backlash when moving between acceleration and deceleration is less than or equal to four degrees, and when a driving force is transmitted, one of the first and second sets of engagement members drivingly engages the engaged gear wheel, and the other set of engagement members is then in an unloaded condition, wherein the actuator assembly ~~is arranged to move~~ moves the unloaded set of engagement members into driving engagement with the unengaged gear wheel to effect a ~~gear change before the loaded set disengages the engaged gear wheel when performing accelerating upshifts and decelerating downshifts, and wherein when performing kickdown shifts the engagement members are arranged to disengage the engaged gear wheel in response to a brief torque interruption prior to the shift~~ downshift.

2. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the selector assembly is arranged such that when a braking force is transmitted the first set of engagement members drivingly engages the engaged gear wheel, and the second set of engagement members is in an unloaded condition, and when a driving force is transmitted the second set of engagement members drivingly engages the engaged gear wheel, and the ~~second~~ first set of engagement members is then in an unloaded condition.

3. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the actuator assembly is arranged to bias the loaded set of engagement members towards the unengaged gear wheel without disengaging the loaded set of engagement members from the engaged gear wheel.

4. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the first and second sets of engagement members are arranged to rotate, in use, with the first shaft.

5. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the first shaft is an input shaft and the second shaft is an output shaft and drive is transferred from the input shaft to the output shaft.

6. (**Canceled**)

7. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the drive formations on the first and second gear wheels comprise a first and second groups of dogs respectively.

8. (**Currently amended**) The ~~transmission system~~ method according to claim 7, wherein the first and second groups of dogs each comprise between two and eight dogs, evenly distributed on the first and second gears respectively.

9. (**Currently amended**) The ~~transmission system~~ method according to claim 8, wherein the first and second groups of dogs each comprise between two and four dogs.

10. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the first and second sets of engagement members comprise between two and eight members.

11. (**Currently amended**) The ~~transmission system~~ method according to claim 10, wherein the first and second sets of engagement members comprise between two and four members.

12. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the first shaft comprises keyways arranged such that the first and second sets of engagement members can slide axially along the keyways and to radially restrain the positions of the sets of engagement members.

13. (**Currently amended**) The ~~transmission system~~ method according to claim 12, wherein a cross-section of the keyways is one of T-shaped, slotted, and dovetailed.

14. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the actuator assembly comprises at least one resiliently deformable means arranged to move at least one of the first and second sets of engagement members into engagement with the first and second gear wheels when the engagement members are in unloaded conditions.

15. (**Currently amended**) The ~~transmission system~~ method according to claim 14, wherein the at least one resiliently deformable means is arranged to bias at least one of the first and second sets of engagement members towards the first or second gear wheel when the engagement members are drivingly engaged with a gear wheel.

16. (**Currently amended**) The ~~transmission system~~ method according to claim 14, wherein the actuator assembly comprises first and second resiliently deformable means connected to the first and second sets of engagement members respectively such that the first resiliently deformable means acts on the first set of engagement members and the second resiliently deformable means acts on the second set of engagement members.

17. (**Currently amended**) The ~~transmission system~~ method according to claim 14, wherein the at least one resiliently deformable means is connected to the first and second sets of engagement members such that the resiliently deformable means acts on both the first and second sets of engagement members.

18. (**Currently amended**) The ~~transmission system~~ method according to claim 12, wherein the members of the first and / or second sets of engagement members can perform limited axial movement relative to each other in the keyways.

19. (**Currently amended**) The ~~transmission system~~ method according to claim 14, wherein the resiliently deformable means is a spring.

20. (**Currently amended**) The ~~transmission system~~ method according to claim 25, wherein the disc spring comprises a plurality of arms, each arm having a first part that extends circumferentially around a portion of the disc spring and a second part that extends substantially radially inwards.

21. (**Currently amended**) The ~~transmission system~~ method according to claim 14, wherein the actuator assembly comprises a fork that is arranged to engage the at least one resiliently deformable means to move the at least one resiliently deformable means axially along the first shaft.

22. (**Currently amended**) The ~~transmission system~~ method according to claim 1, wherein the drive formations are arranged such that they do not extend beyond the outside diameter of the gear wheels.

23. (**Currently amended**) The ~~transmission system~~ method according to claim 8, wherein the first and second groups of dogs each comprise three dogs.

24. (**Currently amended**) The ~~transmission system~~ method according to claim 10, wherein the first and second sets of engagement members comprise three members.

25. (**Currently amended**) The ~~transmission system~~ method according to claim 19, wherein the resiliently deformable means is a disc spring.

26. (**Currently amended**) ~~A~~ The method according to claim 1, wherein ~~for~~ when performing a kickdown shift, the method includes ~~in a transmission system including first and second rotatable shafts, and means for transferring drive from one of the shafts to the other shaft including first and second gear wheels each rotatably mounted on the first shaft and having drive formations formed thereon, a selector assembly for selectively transmitting torque between the first shaft and the first gear wheel and between the first shaft and the second gear wheel, wherein the selector assembly includes an actuator assembly and first and second sets of engagement members that are moveable into and out of engagement with the first and second gear wheels independently of each other, said selector assembly being arranged such that one of the gear wheels is selected by the first and second sets of engagement members and a driving force is transmitted, one of the first and second sets of engagement members drivingly engages the engaged gear wheel, and the other set of engagement members is then in an unloaded condition, wherein the actuator assembly is arranged to move the unloaded set of engagement members into driving engagement with the unengaged gear wheel to effect a gear change, including~~ briefly interrupting torque in the transmission to allow disengagement of the engaged gear wheel prior to the shift, and then selecting the unengaged gear wheel.

27-33. (**Canceled**)

34. (**New**) The method according to claim 1, wherein the first and second sets of engagement members are substantially identical but opposite handed.